We claim:

1. A choke valve, comprising:

a) a valve body forming a bore extending therethrough which provides a body inlet, a body outlet and an insert chamber therebetween;

b) a removable insert assembly positioned in the insert chamber and comprising:

i. a tubular cartridge having a side wall forming an internal bore and having a port communicating with the body inlet, whereby high pressure fluid enters through the body inlet,

ii. a bonnet connected with and closing the upper ends of the cartridge and the body, the bonnet being disengagably connected with the body, and

iii. a pressure reducing flow trim positioned in the cartridge bore, the flow trim having a restrictive opening whereby fluid from the body inlet may enter the flow trim at reduced pressure and pass through the body outlet, and

c) a temperature transmitter carried by the tubular cartridge, and having a temperature sensing component for measuring the temperature at a location in the tubular cartridge and for transmitting signals indicative thereof.

2. The choke valve of claim 1, which includes two temperature transmitters, a first temperature transmitter located within the tubular cartridge and having a temperature sensing component located adjacent the body inlet, for measuring the temperature at body inlet and for transmitting signals indicative thereof; and a second temperature transmitter located within the tubular cartridge and having a temperature sensing component located adjacent the body outlet, for measuring the temperature at the body outlet and for transmitting signals indicative thereof.

3. The choke valve of claim 2, wherein the first and second temperature transmitters are threaded through one or more through holes and sheath channels formed in the cartridge such that the transmitters are carried on the tubular cartridge.

4. The choke valve of claim 1, which further comprises one or more pressure transmitters for measuring the pressure across the choke valve.

5. The choke valve of claim 2, which further comprises one or more pressure transmitters for measuring the pressure across the choke valve.

6. The choke valve of claim 3, which further comprises one or more pressure transmitters for measuring the pressure across the choke valve.

7. The choke valve as set forth in claim 1, wherein:

in (a), the bore is T-shaped to provide a horizontal side inlet, a vertical bottom outlet and a vertical insert chamber;

in (b) iii, the pressure reducing flow trim comprises a tubular cage, aligned with the body outlet, and a throttling sleeve slidable over the cage, the cage having a side wall forming an internal bore and restrictive flow parts aligned with the cartridge side port and the inlet, whereby fluid from the body inlet may enter the cage bore at reduced pressure and pass through the bottom outlet, and

a stem extending through the bonnet, for biasing the throttling sleeve over the cage ports.